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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,866	05/27/2005	Yasuhito Niikura	00862.521154.	4585
5514 7590 04/16/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER TSUI, WILSON W	
			ART UNIT	PAPER NUMBER
			2178	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/16/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/536,866

Applicant(s)

NIIKURA ET AL.

Examiner

Wilson Tsui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/27/05.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20070105, 20050811</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This application is in response to the amendment filed on: 5/27/2005, and IDS filed on: 08/11/2005, and IDS filed on: 01/05/2007.
2. Claims 1-21 are pending. Claims 1, 12, and 21 are independent claims.

#### ***Priority***

3. Acknowledgment is made of applicant's claim for foreign priority (with respect to foreign application: Japan 2004-090064 03/25/2004) under 35 U.S.C. 119(a)-(d).
4. Acknowledgment is made of applicant's claim for continuing data (with respect to the application being a 371 of PCT/JP05/05444 03/17/2005).

#### ***Information Disclosure Statement***

5. The information disclosure statements filed on 01/05/07, and 08/11/2005 are considered by the examiner.

#### ***Drawings***

6. The drawings filed on: 05/27/2005 are accepted.

#### ***Specification***

7. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 1-4, 6, 7, 9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 1, the claim includes the limitation "managing the data of the first and second formats in first and second page data in association with each other, is unclear, since the applicant does not specify what the management process includes (how the management process is performed). The examiner will interpret the management of data includes the act of processing, throughout the rest of this office action to expedite prosecution. The claim also includes the limitation "... managing whether or not an output processor ...", which is also unclear, since the applicant does not specify what the management process includes/performed. The examiner will interpret the management, to include the act of processing, throughout the rest of this office action to expedite prosecution.

With regards to claim 2, the claim includes the limitation "generating said page data management unit". However, based on the claim language of claim 1, a page data management unit is already present/exists. Thus, the examiner is not sure how a page data management unit is generated, when it already exists in claim 1.

With regards to claim 3, the limitation "... and releases the first or second page data" is unclear, since the examiner is not sure what the applicant intends when using the word "release". The examiner will assume throughout the rest of this action that the limitation "release", means that a processing [for a particular page/file/data] is completed.

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With regards to claim 4, the limitation "the first page data is released", is unclear, since the examiner is not sure what the applicant intends when using the word "release". The examiner will assume throughout the rest of this action that the limitation "release", means that a processing [for a particular page/file/data] is completed.

With regards to claim 6, the limitation "release the third page data", is unclear, since the examiner is not sure what the applicant intends when using the word "release". The examiner will assume throughout the rest of this action that the limitation "release", means that a processing [for a particular page/file/data] is completed.

With regards to claim 7, the limitation "said control unit releases sad page ...", is unclear, since the examiner is not sure what the applicant intends when using the word "release". The examiner will assume throughout the rest of this action that the limitation "release", means that a processing [for a particular page/file/data] is completed.

With regards to claim 9, the limitation "... permits a predetermined process for the data", is unclear, since the examiner is not sure what is exactly is being permitted (for example: is the process permitted to execute? Is the process permitted to terminate?).

With regards to claim 12 for including limitations similar to claim 1, is rejected under similar rationale.

With regards to claim 13, for including limitations similar to claim 2, is rejected under similar rationale.

With regards to claim 14, for including limitations similar to claim 3, is rejected under similar rationale.

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With regards to claim 15, for including limitations similar to claim 4, is rejected under similar rationale.

With regards to claim 17, for including limitations similar to claim 7, is rejected under similar rationale.

With regards to claim 18, for including limitations similar to claim 8, is rejected under similar rationale.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1, 4, 5, 6, 10, 11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With regards to claim 1, the claimed "data processing apparatus" appears to be directed to a "computer program per se", without hardware. Thus, the computer program is not statutory, since it is not embodied in a computer readable medium. See MPEP 2106:

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held non statutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and thus statutory.

With regards to claims 4, 5, 6, 10, and 11, they are rejected under the same rationale as claim 1, since they do not remedy the statutory issues of claim 1.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1 – 10, 12-19, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Min et al (US Application: US 2002/0120634, published: Aug. 29, 2002, filed: Dec. 7, 2000).

With regards to claim 1, Min et al et al teaches

*A data reception unit for receiving at least data of a first format for respective pages*  
(paragraph 0013: whereas data of a first image metadata is received)

*A data conversion unit for converting the data of the first format into data of a second format* (paragraph 0013: whereas a decoder converts the first image metadata into a generic format).

*A page data management unit for managing the data of the first and second formats in first and second page data in association with each other* (paragraph 0014: whereas a generic format is part of the management data)

*A control unit for managing whether or not an output processor which executes a predetermined output process with reference to the first or second page data is present* (paragraph 0014: output is executed upon application request)

With regards to claim 2, which depends on claim 1, Min et al teaches *wherein said control unit generates said page data management unit in a memory in response to*

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*reception of the data of the first format for respective pages (paragraph 0014: generic format is created)*

With regards to claim 3, which depends on claim 1 or 2, Min et al teaches *wherein said control unit monitors storage states of the data of the first and second formats in a memory, in a memory, and releases the first or second page data in accordance with the storage states and a reference state by the output processor* (paragraph 0034, 0035, 0041: whereas storage states of the first/original-image data, and second formats/abstracted-image data is managed/monitored in memory, such that the first or second page data is processed/released in accordance with storage states and reference states/application-request(s)).

With regards to claim 4, which depends on claim 3, Min et al teaches *wherein when the output processor issues an instruction of the predetermined output process after the first page data is released, said control unit controls said data conversion unit to convert the data of the second format into data of an output format suited to an output format of the output of the output processor* (paragraph 0013, 0014: whereas after first native format, a generic format is used, and then output is produced that is suitable to the requesting application/output application (paragraph 0038)).

With regards to claim 5, which depends on claim 4, Min et al teaches *wherein said control unit controls said page data management unit to manage the data of the output format using third page data* (paragraph 0014: whereas, through page/data management, a third page data is produced such that the page data is readable by an output application)



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With regards to claim 6, which depends on claim 5, Min et al teaches *wherein upon completion of use of the data of the output format by the output processor, said control unit controls said page data management unit to release the third page data* (paragraph 0014: *whereas, proprietary/application-data/third-page-data is processed by an output application*)

With regards to claim 7, which depends on claim 3, Min et al et al teaches *wherein said control unit releases said page data management unit that manages the first and second page data under a condition that storage of the data of the first and second formats in the memory is complete and reference to page data by the output processor is complete* (paragraphs 0013, 0014, 0041: *whereas, the page data management unit includes the abstraction interface, such that the abstraction interface completes processing upon storage of first and second formats*)

With regards to claim 8, which depends on claim 3, Min et al teaches *wherein when said control unit determines that storage of the data of the first format in the memory is complete, said control unit permits said data conversion unit to start a data conversion operation from the first format to the second format* (paragraph 0013: *whereas, upon storage of the data of the first format, the control process proceeds to perform data conversion from first format to the second format*)

With regards to claim 9, which depends on claim 3, Min et al teaches *wherein said control unit monitors completion of the conversion operation of said data conversion unit and a storage state of the data of the second format in the memory, and permits a predetermined process for the data of the second format in accordance with the storage*

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*state* (paragraph 0013, 0014, 0035, whereas upon completion of the conversion process, such that the second format is stored in memory, a predetermined process such as the predetermined process to retrieve stored second format data by use of an abstraction interface is implemented).

With regards to claim 10, which depends on claim 9, Min et al teaches *wherein said page data management unit is generated for data of each page received by said data reception unit, and when data including a plurality of pages are received, said page data management unit manages the first and second page data while associating respective pages with each other* (paragraphs 0038, 0040, 0041: whereas, a plurality of input pages (each page comprises native metadata) are received and decoded, such that the management unit/abstraction interface manages first and second page data while associating respective pages with each other)

With regards to claim 12, for a data processing method for processing data for respective pages, similar to the method performed by the apparatus of claim 1, is rejected under similar rationale.

With regards to claim 13, which depends on claim 12, for performing a method similar to the method performed by the apparatus in claim 2, is rejected under similar rationale.

With regards to claim 14, which depends on claim 12 or 13, for performing a method similar to the method performed by the apparatus in claim 3, is rejected under similar rationale.

With regards to claim 15, which depends on claim 14, for performing a method similar to the method performed by the apparatus in claim 4, is rejected under similar rationale.

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With regards to claim 16, which depends on claim 15, for performing a method similar to the method performed by the apparatus in claim 5, is rejected under similar rationale.

With regards to claim 17, which depends on claim 16, for performing a method similar to the method performed by the apparatus in claim 6, is rejected under similar rationale.

With regards to claim 18, which depends on claim 12 or 13, for performing a method similar to the method performed by the apparatus in claim 7, is rejected under similar rationale.

With regards to claim 19, which depends on claim 18, for performing a method similar to the method performed by the apparatus in claim 10, is rejected under similar rationale.

With regards to claim 21, for a computer program for making a computer execute a data processing method of claim 12, is rejected under similar rationale as the rejection for claim 12 above.

With regards to claim 21, for a computer program for making a computer execute a data processing method of claim 13, is rejected under similar rationale as the rejection for claim 13, above.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Min et al (US Application: US 2002/0120634, published: Aug. 29, 2002, filed: Dec.

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7, 2000), in further view of Huttenlocher et al (US Patent: 5,884,014, issued: Mar. 16, 1999, filed: May 23, 1996).

With regards to claim 11, which depends on claim 7, Min et al teaches *wherein first format is one of a plurality of data formats including JPEG data* (paragraph 0040), and *the second format* (as similarly explained in the rejection for claim 1, and is rejected under similar rationale).

However, Min et al does not expressly teach the data of the second format *has a JBIG data format*.

Huttenlocher et al teaches the second format *has a JBIG data format* (column 26, lines 42-52: whereas JBIG is a secondary format through conversion).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Min et al's second format, such that it would have been a JBIG data format, as taught by Huttenlocher et al. The combination of Min et al and Huttenlocher et al would have allowed Min et al to have "implemented a known encoding technique" (Huttenlocher, column 4, lines 20-25).

With regards to claim 20, which depends on claim 19, for performing a method similar to the method performed by the apparatus of claim 11, is rejected under similar rationale.

### **Conclusion**

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Leeder et al (US Application: US 2002/0076115): This reference teaches decoding images and converting source pages to an intermediate format.

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- Chang et al (US Patent: 6,947,995 B2): This reference teaches conditionally based output by processing intermediate format data.
- Camera et al (US Patent: 7,162,053 B2): This reference teaches generating intermediate data/meta data from source images.
- Liu et al (US Patent: 6,523,046 B2): This reference teaches creating an intermediate format from various types of source pages.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wilson Tsui whose telephone number is (571)272-7596. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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W.T. 4/12/07

Wilson Tsui

Patent Examiner

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April 12, 2007

  
CESAR PAULA  
PRIMARY EXAMINER